

I. AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 5, line 12 and ending on page 5, line 24 as follows. No new matter has been added.

Referring to the FIGURE there is illustrated in a functional block diagram an asymmetrical digital subscriber line (ADSL) in accordance with an embodiment of the present invention. The ADSL 10 connects a customer premise equipment (CPE) 11 to a central office (CO) 12. The CPE 11 includes an ADSL modem 14 (ATU-R), POTS splitter 16, a computer 18 and a telephone 20. The CO 12 includes an ADSL modem 22 (ATU-C), a POTS splitter 24, and a telephone switch 26. The ADSL 10 effectively includes the ADSL modems 14 and 22 and the unshielded twisted pair (UTP) 28 there between. The ADSL arrangement of the FIGURE is intended as merely representative and person skilled in the art of DSL would appreciate that POTS splitter 16 can be centralized as shown or distributed throughout the premise and attached to each telephoning device telephone, facsimile, or answering machine. Actual connections would depend on the version of ADSL used for example G-dmt or G-lite. The ADSL modem 14 includes a first circuit 50 for determining and storing on a per bin basis, channel frequency response and noise measurements; a second circuit 52 for determining and storing a signal-to-noise measurement on a per bin basis; a receiver 54 for retrieving the stored frequency response, noise and signal-to-noise measurements from the ADSL modem 22. An analyzer 56 may further be used for analyzing time dependent changes in cross talk levels and line attenuation. The ADSL modem 22 includes a first circuit 58 for determining and storing on a per bin basis, channel frequency response and noise measurements; a second circuit 60 for determining and storing a signal-to-noise measurement on a per bin basis; a receiver 62 for retrieving the stored frequency response, noise and signal-to-noise measurements from the ADSL modem 14. An analyzer 64 may further be used for analyzing time dependent changes in cross talk levels and line attenuation.